USGS National Wildlife Health Center Diagnostic Case Submission Guidelines

The following guidelines broadly outline the framework used by the National Wildlife Health Center (NWHC) to determine cases and specimens for acceptance for diagnostic evaluation. All submissions are managed on a case-by-case basis and must be submitted through, or in consultation with, an appropriate federal, state or Tribal agency and the NWHC point of contact. Submissions from public, rehabilitation facilities, universities, laboratories or other entities are not accepted without prior consultation with appropriate federal, state or Tribal agency.

Species Accepted by NWHC

Any free-living wildlife species (birds, mammals, reptiles, or amphibians as well as fish and corals) including but not limited to:

- Species under federal authority
 - o Migratory birds under Migratory Bird Treaty Act or Eagle Protection Act
 - o Federal endangered/threatened species (including Candidates for Listing)
 - Marine mammals under USFWS jurisdiction (walrus, manatee, sea otter, polar bear)
- Species under state authority at the request of the state wildlife agency or by a federal/ Tribal agency on Federal/Tribal managed lands.
- Marine mammals under NOAA authority (whales, dolphins, seals or sea lions) at the request of NOAA.

Submissions from Morbidity and Mortality Events

A mortality event is any unexpected illness or death in free-living wildlife. Events usually are detected quickly and warrant collection of animals to determine the cause. Specimens collected from the following will be considered for submission to NWHC:

- Mortality events involving ≥ 5 individuals of free-living wildlife species.
- Mortality involving individual free-living wildlife (1-4 animals) if the case includes:
 - Federal or state endangered/threatened species; candidate species; species of special management concern.
 - o Potential concern for zoonotic or domestic animal diseases.
 - Emerging disease currently being investigated by NWHC (e.g. avian influenza, white-nose syndrome).
- Species submitted by a state or Tribal wildlife agency when the cause(s) of mortality is important to the submitting agency, its wildlife populations, or domestic animal and human health.

Type of Specimens (other than Carcasses) Generally Accepted by NWHC

Freshly dead or euthanized whole animals are preferred to determine the cause of death. However, NWHC may accept tissues for diagnostic evaluation in consultation with a partner if:

• Carcasses are larger than a large canid (and therefore difficult to ship); in these cases select tissues from these species can be submitted.

• A partner agency requests NWHC assistance with testing necropsied animals or ancillary tests to identify cause(s) of mortality critical to the submitting agency, its wildlife populations, domestic animals or human health.

Types of Cases Not Generally Accepted (with Exceptions) by NWHC

- Individual animals when the cause of death is evident.
 - o NWHC may recommend freezing carcasses and monitoring for additional mortality. If this occurs, submission of specimens may be warranted.
 - Exceptions may be made for a partnering agency that is compiling passive/opportunistic disease surveillance information important for the management of a species.
- Carcasses that have been scavenged or their body cavities are already opened.
- Animals that die in rehabilitation. Exceptions may include:
 - o Federally protected species.
 - o Animals that died within 72 hours of admission and no drug therapies have been administered (supportive care only).
 - o Cases where a partner agency has a specific interest and involvement in the case.
 - An unusual increase in morbidity/mortality in the source wild population has been reported.
 - o Emerging disease currently being investigated by NWHC is suspected (e.g. turtle Ranavirus, snake fungal disease).
- Captive animals (originating from zoos, private collections), except in consultation with a state, federal or Tribal governmental agency. Exceptions may include but are not limited to:
 - o Federally protected species.
 - Animals from state, federal or Tribal species reintroduction efforts, or captive propagation programs for species recovery.
 - o Animals recently captured from the wild for captive propagation.
 - o Instances where there is potential for pathogen spill-over into free-ranging wildlife.
- Routine diagnostic services for live animal health screens, unless NWHC is a project collaborator.

Diagnostic Services for Research Activities

NHWC may collaborate in selected wildlife disease research activities. Partner requests for research-oriented diagnostic services must be communicated to NWHC early in the study planning process, as these projects may require additional resources. NWHC scientists should be part of the study planning prior to submission of these types of samples.

NWHC's Involvement in Legal Wildlife Issues

Federal (USFWS) Law Enforcement Cases:

• Mortality events where USFWS Special Agents suspect unlawful human involvement in the death of animal(s) are referred to the USFWS Forensic Laboratory (USFL).

• On a case by case basis, NWHC accepts law enforcement cases from USFWS Special Agents, under chain of custody and with a federal investigation case number (INV#). This may occur if a cause of death determination is needed and the USFL is unable to accept animal(s) or make this determination, or if the Special Agent specifically requests an NWHC investigation.

State Law Enforcement Cases:

• NWHC does not accept legal cases from state wildlife law enforcement agencies. State officers are referred to their state wildlife agency (health program/veterinarian if applicable). Mortality events can be reported to USFWS Special Agents who can submit animals to USFL or NWHC using the above criteria.